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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte SHUSAKU SHIBASAKI

Appeal 2009-003307
Application 10/521,539
Technology Center 3600

Decided: September 21, 2009

Before WILLIAM F. PATE III, STEVEN D.A. McCARTHY, and MICHAEL W. O'NEILL, *Administrative Patent Judges*.

WILLIAM F. PATE III, *Administrative Patent Judge*.

DECISION ON APPEAL

STATEMENT OF CASE

This is an appeal from the final rejection of claims 1-10. These are the only claims in the application. We have jurisdiction over the appeal under 35 U.S.C. §§ 134 and 6.

The claimed invention is directed to a buffer for use in a hoistway in of an elevator system for cushioning the elevator or counterweight in the event of an abnormal overrun.

Claim 1, reproduced below, is further illustrative of the claimed subject matter.

1. A buffer for an elevator system, the buffer comprising:

a conical coil spring,

wherein the buffer is configured to be disposed at one end of a hoistway of the elevator system for contacting a vertically moving member of said elevator system in the event of an abnormal overrun,

wherein the conical coil spring includes a spiral coil element that comprises a series of coils,

wherein a radius of the spiral coil element decreases along an axis of the conical coil spring such that if the spiral coil spring is fully compressed, the coils of the spiral coil spring are configured to be arranged in a substantially planar configuration, and

wherein a thickness of the coil element is substantially uniform between an outermost coil and an innermost coil.

REFERENCES

The references of record relied upon by the examiner as evidence of anticipation and obviousness are:

Davis	US 190,291	May 1, 1877
Fowler	US 380,651	Apr. 3, 1888
Gilpin	US 568,345	Sep. 29, 1896
Solymos	US 3,768,596	Oct. 30, 1973

REJECTIONS

Claim 8-10 stand rejected under 35 U.S.C. § 112, second paragraph, as being indefinite.

Claims 1-3, 5, 6 and 8-10 stand rejected under 35 U.S.C. § 103(a) as unpatentable over Gilpin in view of Fowler.

Claim 4 stands rejected under 35 U.S.C. § 103(a) as unpatentable over Gilpin in view of Fowler and further in view of Davis,

Claim 7 stands rejected under 35 U.S.C. § 103(a) as unpatentable over Gilpin in view of Fowler and further in view of Solymos.

A rejection of claim 4 under 35 U.S.C. § 112, first paragraph, as being based on a disclosure which does not provide written description support for the subject matter of the claim has not been repeated by the Examiner in the Answer and is considered withdrawn.

The Appellant raises the issue of the pending objection to the drawings for failure to show features claimed in claims 4 and 8-10. The objection to the drawings is not within the jurisdiction of this Board. *See Ex parte Wolf*, 65 USPQ 527, 528 (Bd. of Pat. App. 1945).

ISSUES

Appellant argues that claims 8-10 are not indefinite since the portion of the coil that is uniform in thickness is the portion between the outermost and innermost coils. Appellant further argues that the term "substantially" does not render the subject matter of claims 8-10 indefinite. Therefore, the first issue for our consideration is whether the Appellant has established that the Examiner erred in rejecting claims 8-10 as indefinite.

Appellant argues that the combined subject matter of Gilpin and

Fowler would not have rendered obvious claims 1-3, 5, 6, and 8-10, inasmuch as Fowler does not disclose that the thickness of the coil element is substantially uniform as claimed in claim 1.

Accordingly, the second issue for our consideration is whether the Appellant has established that the Examiner erred in finding that the combined teachings of Gilpin and Fowler teach a conical coil spring wherein the thickness of the coil element is substantially uniform between an outermost coil and an innermost coil.

SUMMARY OF DECISION

We have carefully reviewed the rejections on appeal in light of the arguments of the Appellant and the Examiner. As a result of this review, we have reached the determination that claims 8-10 are not indefinite under U.S.C. § 112, second paragraph. It is our further conclusion that the prior art does not establish the prima facie obviousness of the claims on appeal. Therefore the Appellant has established that the Examiner erred. The rejections on appeal are reversed. Our reasons follow.

FINDINGS OF FACT

The following are our Findings of Fact with respect to the scope and content of the prior art and the differences between the prior art and the claimed subject matter. Gilpin discloses a buffer for an elevator disposed at one end of the hoistway to prevent an abnormal overrun of the elevator component. See page 1, ll. 12-20. One component of Gilpin is a plurality of conical springs D Gilpin differs from the clamed subject matter in that Gilpin does not disclose that when the conical springs are compressed, the

coils of the spiral spring are configured to be arranged in a substantially planar configuration.

Fowler discloses a spiral or conical coil spring of general utility. See page 1, ll. 67-71. As can be seen from figure 1, when Fowler is compressed, the coils of the spiral spring are configured to be arranged in a substantially planar configuration. However, Fowler discloses that the wire of the spring, instead of being made of uniform size or diameter, gradually diminishes or tapers from the larger end B of the spring toward the smaller end A. See page 1, ll. 31-41. Thus, Fowler differs from the claimed subject matter in that the thickness of the coil elements are not substantially uniform between the outermost and innermost coil.

ANALYSIS

We are in disagreement with the Examiner's finding that Fowler teaches a coil spring wherein a thickness of the coil element is substantially uniform between an outermost coil and an innermost coil. Furthermore, since this is a specific requirement of the independent claim on appeal, and this requirement or element is not found in the prior art, we are constrained to reverse the obviousness rejections of all of the claims on appeal.

Turning to the rejection under § 112, the Examiner argues that the term "substantially" is a relative term which is not defined by the claims, and that there is no guidance in the Specification to determine what "substantially" means in this instance. First of all, we do not believe that "substantially" renders the claimed subject matter indefinite in this case. "Substantially" is often used to mean largely but not wholly what is specified. *See, e.g., York Products, Inc., v. Central Tractor Farm & Family Center,* 99 F.3d 1568, 1572-73 (Fed. Cir. 1996); *See also, Amhil Enterprises*

Ltd. v. Wawa, Inc., 81 F.3d, 1554, 1562, (Fed. Cir. 1996).

Furthermore, we believe that claims 8-10 are not indefinite when construed in light of the ultimate limitation of claim 1. Claim 1 merely states that the thickness of the coil elements *between* an outermost coil and an innermost coil are substantially uniform. This does not state anything with respect to the diameter of the outermost or innermost coil which diameters are claimed in claims 8-10.

CONCLUSION

The Appellant has established that the Examiner erred in rejecting claims 1-3, 5, 6 and 8-10 as unpatentable over Gilpin in view of Fowler.

The Appellant has established that the Examiner erred in rejecting claim 4 as unpatentable over Gilpin in view of Fowler and further in view of Davis.

The Appellant has established that the Examiner erred in rejecting claim 7 as unpatentable over Gilpin in view of Fowler and Solymos.

Further, the Appellant has established that the Examiner erred in rejecting claims 8-10 as unpatentable under U.S.C. § 112, second paragraph.

The rejections of all of the claims on appeal are reversed

REVERSED

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